

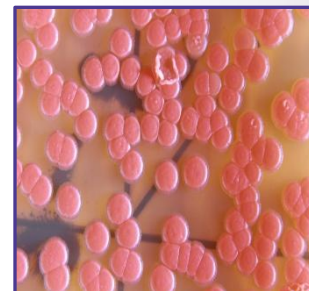
The procedure for cultivation of *Rhodotorula gracilis* yeasts

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Patent application: No. **a 2021 0013/2020.02.18**

Aim: The invention relates to microbial biotechnologies, in particular to the process of increasing the content of protein and essential amino acids in the biomass of yeasts *Rhodotorula gracilis*.



Essence: The process according to the invention includes obtaining the yeast suspension of the *Rhodotorula gracilis* CNMN-Y-30 strain grown for 24 hours on YPD medium, inoculating the suspension in 5% volume concentration and cultivating on YPD medium with the addition of ZnO nanoparticles 50 nm in concentration 20.0-70.0 mg/L under sterile conditions, at +28...30°C with continuous stirring at 180...200 rot/min within 72 hours.



Advantage: The technical result of the invention consists in significantly increasing the content of proteins and essential amino acids by 32%-89% in the levurian biomass compared to the control and reducing the cultivation time up to 72 hours.

Field of application: Agriculture and Food Industry, Medicine - Health Care-Cosmetics and Pharmaceutical Industry